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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,992	02/11/2004	Thorsten Rische	PO7971/LeA 36,359	5863

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EXAMINER

BUTTNER, DAVID J

ART UNIT PAPER NUMBER

1712

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/776,992

Applicant(s)

RISCHE ET AL.

Examiner

David Buttner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12, 13, 15, 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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Claims 1,4 and 7 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dobler '247.

Dobler discloses aqueous coating compositions of polyurethane, polyester, blocked polyisocyanate and amine resin (abstract). The polyurethane has no hydroxyl groups (ie no Zerewitinov groups). There appears to be approximately 0.2 mol of –NCO groups provided by the blocked polyisocyanate in the examples (col 7 line 49).

Note that applicant specifically allows for other binders, etc in his “one component” coating (page 19 line 19-30 of spec).

Claims 1-4,7,12,13 and 17 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Vogt-Birnbrich '496.

Vogt discloses aqueous coatings of hydrophilic polyurethanes and crosslinker such as blocked polyisocyanate (abstract). The polyurethane can have a hydroxyl number of zero (abstract) which would be zero Zerewitinov groups. A wide ratio of crosslinking agent to polyurethane is permitted (col 16 line 53) which would encompass applicant's (B)/(A) limitation.

Claims 1-4,7,12,13 and 17 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Blum '707.

Blum discloses aqueous coatings of polyesterurethane polyols (abstract). Blocked polyisocyanates may be included as a crosslinker (col 7 line 16). The hydroxyl content of the polyesterurethane can be as little as 0.25% (col 1 line 51). This is believed to fall within applicant's Zerewitinov range based on the following calculation:  
$$0.25\text{g OH}/100\text{g polymer} \times 1\text{mol OH}/17\text{ g OH} = 0.15\text{mmol OH/g polymer}$$

The amount of crosslinking agent (10-35% @ col 8 line 45) which would encompass applicant's (B)/(A) limitation when converted to a mol basis.

Claims 5,6 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Dobler '247 or Vogt-Birnbrich '496 or Blum '707 in view of Hughes '033 or Melchior 2002/0165334.

Each of the primary references suggest blocking their polyisocyanates, but do not mention pyrazole blocking agents.

Both Hughes (claim 1) and Melchior (abstract) suggests such blocking agents. Hughes explains (col 1 line 47-59) that these pyrazole blocking agents dissociate at lower temperatures than more common blocking agents. It would have been obvious to utilize pyrazoles as the blocking agents in the Dobler or Vogt or Blum compositions for the expected advantages.

Applicant's arguments filed 6/7/06 have been fully considered but they are not persuasive.

Applicant argues Dobler includes a polyester of high OH number.

This is not convincing. Applicant only limits the Zerewitinov groups of the polyurethane – not any other polymers that may be present. As pointed out in the rejection, applicant's specification clearly additional hydroxyl functional binders can included (page 19 line 27).

Applicant argues Vogt's high number of CH-acidic groups are excluded by applicant's limitation on the Zerewitinov content.

This is not convincing. Applicant's claim 1 only limits the number of hydroxyl, amine and thiol groups. Applicant's specification (page 4 line 28) does not consider CH-

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acidic groups as "Zerewitinov" groups. Furthermore, even if CH-acidic groups were considered to be Zerewitinov groups, Vogt's minimum number of CH-acidic groups (1) at the maximum MW (1,000,000) would be only 0.001mmol/g.

Applicant argues Blum does not suggest hydrophobic polyisocyanates.

This is not convincing. Applicant's claims do not call for "hydrophobic" anything. The claims require "no hydrophilic groups". Blum's "may be hydrophilically modified" is suggestive of blocked isocyanates without hydrophilic groups. Secondly, many of the species of isocyanates and blocking agents listed by Blum (col 7 line 30-40; col 7 line 51-54) are the species of isocyanates and blocking agents listed by applicant (page 16; page 17). How can the same blocked isocyanates be hydrophobic for applicant, but not hydrophobic for Blum?

This application contains claims 8-11 drawn to an nonelected invention. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAVID J. BUTTNER  
PRIMARY EXAMINER

David Buttner

7/28/06

